- (i) An emergency switch must be provided in the normally ungrounded main supply conductor from a battery. The switch must be accessible and located as close to the battery as practicable.
- (j) Disconnect means must be provided on the supply side of and adjacent to all fuses for the purpose of deenergizing the fuses for inspection and maintenance purposes.
- (k) If the disconnect means is not within sight of the equipment that the circuit supplies, means must be provided for locking the disconnect device in the open position.
- (1) Fuses must be of the cartridge type only and be listed by Underwriters Laboratories or another independent laboratory recognized by the Commandant.
- (m) Each circuit breaker must meet UL 489, "Molded-Case Circuit Breakers and Circuit Breaker Enclosures," or other standard specified by the Commandant, and be of the manually reset type designed for:
  - (1) Inverse time delay;
- (2) Instantaneous short circuit protection; and
- (3) Switching duty if the breaker is used as a switch.
- (n) Each circuit breaker must indicate whether it is in the open or closed position.

[CGD 85-080, 61 FR 928, Jan. 10, 1996; 61 FR 20556, May 7, 1996, as amended at 62 FR 51352, Sept. 30, 1997; USCG-2002-13058, 67 FR 61279, Sept. 30, 2002]

### § 120.390 Shore power.

A vessel with an electrical system operating at more than 50 volts, which is provided with a means to connect to shore power, must meet the following:

- (a) A shore power connection box or receptacle must be permanently installed at a convenient location:
- (b) A cable connecting the shore power connection box or receptacle to the switchboard or main distribution panel must be permanently installed;
- (c) A circuit breaker must be provided at the switchboard or main distribution panel for the shore power connection; and
- (d) The circuit breaker, required by paragraph (c) of this section, must be interlocked with the vessel's power sources so that shore power and the

vessel's power sources may not be operated simultaneously.

#### § 120.392 Radiotelephone installations.

A separate circuit, with overcurrent protection at the main distribution panel, must be provided for each radiotelephone installation.

# Subpart D—Lighting Systems

### §120.410 Lighting fixtures.

- (a) Each lighting fixture globe, lens, or diffuser must have a guard or be made of high strength material, except in an accommodation space, radio room, galley, or similar space where it is not subject to damage.
- (b) A lighting fixture may not be used as a connection box for a circuit other than the branch circuit supplying the fixture.
- (c) A lighting fixture must be installed as follows:
- (1) Each fixture must comply with §120.200.
- (2) Each lighting fixture and lampholder must be fixed. A fixture must not be supported by the screw shell of a lampholder.
- (3) Each pendant type lighting fixture must be suspended by and supplied through a threaded, rigid conduit stem.
- (4) Each table lamp, desk lamp, floor lamp, or similar equipment must be secured in place so that it cannot be displaced by the roll or pitch of the vessel.
- (d) An exterior lighting fixture in an electrical system operating at more than 50 volts must comply with the requirements of UL 595, "Marine Type Electric Lighting Fixtures," or other standard specified by the Commandant. A lighting fixture in an accommodation space, radio room, galley or similar interior space may comply with, UL 1570, "Fluorescent Lighting Fixtures," UL 1571, "Incandescent Lighting Fixtures," UL 1572, "High Intensity Discharge Lighting Fixtures," UL 1573, "Stage and Studio Lighting Units," or UL 1574, "Track Lighting Systems," as long as the general marine requirements of UL 595 are satisfied.

## § 120.420 Navigation lights.

All vessels must have navigation lights that are in compliance with the applicable sections of the International